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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/788,540	02/21/2001	Shigeru Fujita	1484.1004	5606
21171	7590	05/18/2007		
STAAS & HALSEY LLP SUITE 700 1201 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005			EXAMINER LEE, PHILIP C	
			ART UNIT 2152	PAPER NUMBER
			MAIL DATE 05/18/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

09/788,540

Applicant(s)

FUJITA, SHIGERU

Examiner

Philip C. Lee

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 February 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 and 3-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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1. This action is responsive to the amendment and remarks filed on February 16, 2007.
2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/12/07 has been entered.
3. Claims 1 and 3-9 are presented for examination and claim 2 is canceled.
4. The text of those sections of Title 35, U.S. code not included in this office action can be found in a prior office action.

*Claim Rejections - 35 USC 101*

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 1 and 3-8 are rejected under 35 U.S.C. 101 because "A client/system system", "A server", or "A client" comprising software, driver, virtual I/O port, client, and handler (i.e., software) does not include any functional structure of an apparatus. An apparatus comprising a

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software is considered as program per se, which is not one of the categories of statutory subject matter.

*Claim Rejections - 35 USC 112*

3. Claims 1, 3 and 6-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a. Claim language in the following claims is not clearly understood:

i. As per claim 1, line 10, it is unclear if “an I/O port at the client” refers to “a client-side I/O port” in line 6; Lines 10-11, it is unclear if “the client-side I/P port” refers to “an I/O port at the client” in line 10.

ii. As per claim 3, lines 6 and 10, they have the same problems as claim 1 above.

iii. As per claim 9, lines 7 and 13-14, they have the same problems as claim 1 above.

*Claim Rejections - 35 USC 102*

7. Claims 1, 3, 4, 5, 7, and 9 are rejected under 35 U.S.C. 102(e) as being anticipated by Grun, U.S. Patent Application Publication 2004/0107304 (hereinafter Grun).

8. As per claims 1, 3, 4 and 9, Grun teaches a system comprising: a server ((0055)), comprising:

client-side software at the server (applications at the host served as initiator) to generate operating instructions for an I/O device connected to a client ((0042), (0044));

a client-side device driver (20, fig. 2) at the server for input-output control of a client-side I/O port controlling the I/O device connected to the client, based on the operating instructions from the client-side software at the server((0043), (0044)); and

a virtual I/O port at the server to provide the client-side device driver at the server with an interface having same function as an I/O port at the client as the client –side I/O port for the client-side device driver at the server by transmitting an input-output control received from the client-side device driver at the server and informing the client-side device driver at the server of an event received from the I/O device connected to the client (fig. 2; (0042), (0043), (0050)) (channel adapter provides interface for data and message transfer between I/O drivers and I/O controller (inherently comprised I/O ports), which controls I/O devices at the I/O unit (i.e. I/O port at the client)); and

a client in communication with the server and connected to the I/O device (fig. 2, 3 and 5; (0057)), the client comprising:

a client-side device handler (22,26, fig. 2) to receive the input-output control from the virtual I/O port in the server and to transmit the event, from the I/O device connected to the client, to the virtual I/O port in the server ((0050),(0042), (0043)),

wherein the I/O port at the client controls the I/O device connected to the client according to an input-output control from the client-side device handler ((0042),(0043)) (it is inherent that

I/O controller at I/O unit that controls the I/O device according to data and messages received by target channel adapter (device handler) to the I/O controller (fig. 2)).

9. As per claim 5, Grun teaches the invention as claimed in claim 4 above. Grun further teach at least one client-side I/O port, which is coupled with the client-side I/O device, and which is controlled by the client-side device driver in the server ((0042)).

10. As per claim 7, Grun teaches the invention as claimed in claim 1 above. Grun further teach wherein the client and server communicate via a LAN ((0044)).

*Claim Rejections - 35 USC 103*

11. Claims 6 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grun in view of Official Notice.

12. As per claim 6, Grun does not specifically teach a bar code reader as the I/O device. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made that an I/O device may be any type of device that facilities input from the user and output to the user. The concept of controlling such device from a target client may be applied to any type of I/O device. Official Notice is taken for both the concept and advantages of utilizing a bar code reader as an I/O device is well known in the art. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Grun to

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include a bar code reader in order to enhance and make it easier for user to input/output certain types of products to the system.

13. As per claim 8, Grun does not specifically teach World Wide Web (WWW). However, it would have been obvious to one of ordinary skill in the art at the time the invention was made that a server (initiator) and a client (target client) may be communicated via any type of network. The concept of communicating between the client and server as disclosed by Grun is not limited to a LAN and may be applied to any other types of network. Official Notice is taken for the concept of WWW is well known in the art. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include WWW in Grun's system in order to enhance and make it accessible for Internet user to communicate with I/O devices through the Internet.

14. Applicant's arguments with respect to claims 1, 3-9 have been considered but are not persuasive.

15. In the remarks, applicant argued that:

- (1) Grun fails to teach host channel adapter functions as a virtual I/O port for an I/O port on the I/O unit.

16. In response to point (1), Grun teaches host channel adapter providing an interface for data and message transfer between I/O devices and I/O controller, which inherently comprised I/O

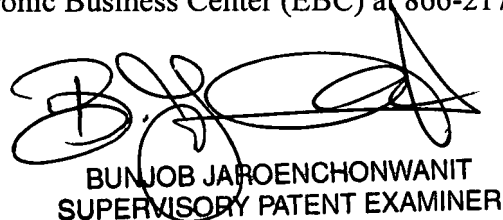
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port for controlling connected I/O devices at the I/O unit. This means that host channel adapter functions as the claimed virtual I/O port to interface and to pass instructions to the I/O port of the I/O controller on the I/O unit ([0042]).

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Shah, US 6,889,380; Shah et al, US 7,039,922.

18. A shortened statutory period for reply to this Office action is set to expire THREE MONTHS from the mailing date of this action. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip C Lee whose telephone number is (571)272-3967. The examiner can normally be reached on 8 AM TO 5:30 PM Monday to Thursday and every other Friday. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on (571) 272-3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
BUNJOB JAROENCHONWANIT  
SUPERVISORY PATENT EXAMINER

S/14/07